

The Train Horn Rule and Quiet Zones

Under the Train Horn Rule (49 CFR Part 222), locomotive engineers must begin to sound train horns at least 15 seconds, and no more than 20 seconds, in advance of all public grade crossings.

If a train is traveling faster than 60 mph, engineers will not sound the horn until it is within $\frac{1}{4}$ mile of the crossing, even if the advance warning is less than 15 seconds.

There is a "good faith" exception for locations where engineers can't precisely estimate their arrival at a crossing and begin to sound the horn no more than 25 seconds before arriving at the crossing.

Train horns must be sounded in a standardized pattern of 2 long, 1 short and 1 long blasts. The pattern must be repeated or prolonged until the lead locomotive or lead cab car occupies the grade crossing. The rule does not stipulate the durations of long and short blasts.

The maximum volume level for the train horn is 110 decibels which is a new requirement. The minimum sound level remains 96 decibels.

Establishing Quiet Zones:

The final rule also provides an opportunity for localities nationwide to mitigate the effects of train horn noise by establishing "new quiet zones." "No horn" restriction which may have existed prior to the establishment of the rule may be qualified to be "pre-rule quiet zones". In a quiet zone, railroads have been directed to cease the routine sounding their horns when approaching public highway-rail grade crossings. Train horns may still be used in emergency situations or to comply with other Federal regulations or railroad operating rules. Localities desiring to establish a quiet zone are first required to mitigate the increased risk caused by the absence of a horn

What is a Quiet Zone and how can my community qualify for one?

Quiet Zones are sections of the railroad corridor where train crews don't have to sound the horn at railroad crossings. Communities can qualify for Quiet Zone status if the crossing meets minimum safety requirements. These requirements are outlined in the Department of Transportation Federal Railroad Administration Final Rule 49 CFR, Parts 222 and 229, as it pertains to Quiet Zone designation. It should be noted that train crews are still permitted to sound the horn within a Quiet Zone for railroad or safety reasons.

What is needed to create a Quiet Zone?

To establish a Quiet Zone, all crossings must have physical safety improvements that compensate for the loss of the train horn as a warning device. For this reason, all crossings must have - at a minimum - advance warning devices with both flashing lights and crossing gates. Additional safety measures may be required at each crossing. These are determined during an on-site analysis of each crossing.

How much does it cost?

The cost to create a Quiet Zone depends on the existing infrastructure at each crossing and how much infrastructure improvement is needed at each one to meet the minimum safety requirements. The upgrade requirements will also be based on the unique conditions at each crossing, such as traffic volumes and the number of vehicle lanes at the crossing. The average cost of implementing a Quiet Zone crossing "from scratch" can range from \$300,000 to \$500,000. However, because each crossing is unique, the total cost to implement a Quiet Zone in a specific location will vary.